

FIGURE 1

3547440

EXTRACELLULAR

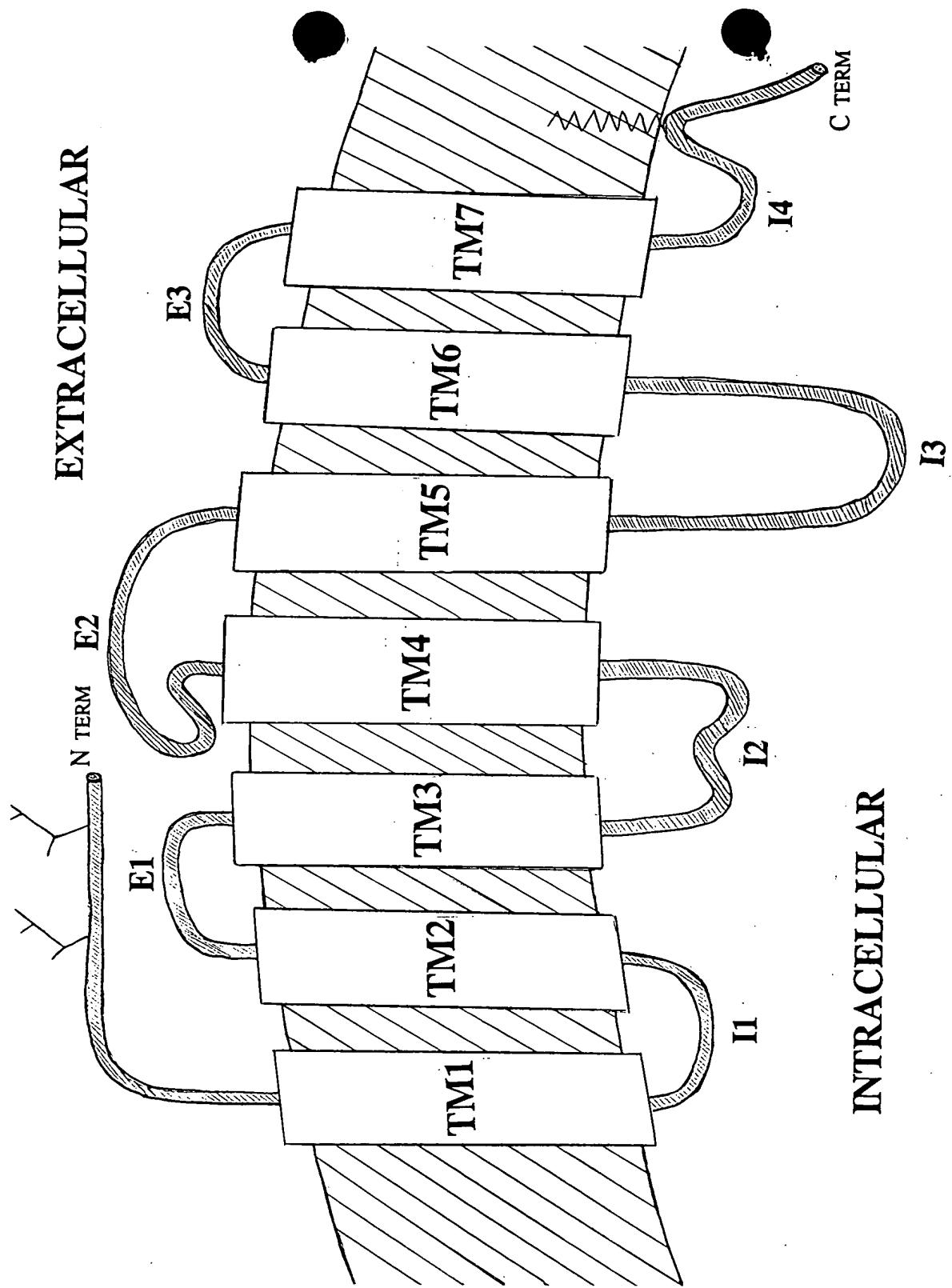


FIGURE 2

090501200 - DELE

Effect/Disease	Receptor	Auto-Antibody	Over Expression	Naturally Constitutively Active	Mutated Position	Point/Cassette Mutation	Ref.
Graves' Disease	Thyrotropin	X					1
Thyroid Adenoma	Thyrotropin				3rd Int. Loop	D619G, D619C A623I	2
Non-Autoimmune Hyperthyroidism	Thyrotropin				TM3 & TM7	V509A, C672Y	3
Constitutive Activation	Thyrotropin				Carboxy Tail	Truncation	4
Male Precocious Puberty	Lutropin				TM6	D578G/Y	5
Cardiomyopathy	Arenergic B1	X					6
Hypertension	Adrenergic 1A	X					7
Constitutive Coupling/Gs	Beta 2 Adrenergic				3rd Int. Loop		8
Constitutive IP3 Release	Alpha 1B Adrenergic				3rd Int. Loop	All Amino Acids At A293	9
Constitutive Coupling/Gi	Alpha 2A Adrenergic				3rd Int. Loop TM6	T348C/E/K	10
Constitutive IP3 Release	m5 Muscarinic				TM2/TM6		11
Constitutive Coupling Gi	EP3 Prostaglandin				Carboxy Tail		12
Constitutive IP3 Release	Thrombin				2nd Ext. Loop		13
Constitutive Activation	STE3 Pheromone				3rd Int. Loop		14
Retinitis Pigmentosa	Rhodopsin				TM7	K296E/M	15
Schizophrenia	Dopamine D4	X					16
Major Depression	Serotonin 5HT2A	X					17
Constitutive Activation	Serotonin 5HT2A				3rd Int. Loop	C322K	17
Constitutive Activation	Serotonin 5HT2C	X		X			18
Constitutive Activation	Serotonin 5HT2C				3rd Int. Loop	S312K/F	18
Constitutive Activation	(RDC8) Adenosine				2nd Ext. & 3rd. Int. Loops		19
Jansen's Disease	Parathyroid Hormone (PTH)					H223R, T410P	20
Hypoparathyroidism	Calcium Sensing				TM1, Ext. N-terminal	E128A, T151M	21
Kaposi's Sarcoma	Herpes Virus			X			22
Constitutive Activation	m2 Muscarinic				3rd Int. Loop	VT11(A1-4)] Insertion Cassette	23
Constitutive Activation	Metabotropic Glutamate				Carboxy Tail	Alternate Splicing	24
Constitutive Activation	Bradykinin B2	X					25
Mu Opiod				Agonist Induced			26
Constitutive Activation	Dopamine D1B			High Basal			27
Pigmentation	MSH				TM2, 1st Int. & Frame Shift	S69L, E69K L98P, H183Q	28
Constitutive Activation	ACCA			X			29
Constitutive Activation	Muscurinic m1-m4	X		X			30
Constitutive Activation	Musacrinic		Over Express. Gq				31
Constitutive Role	Histamine H1				TM3	Asp116	32

FIGURE 3

FIGURE 4

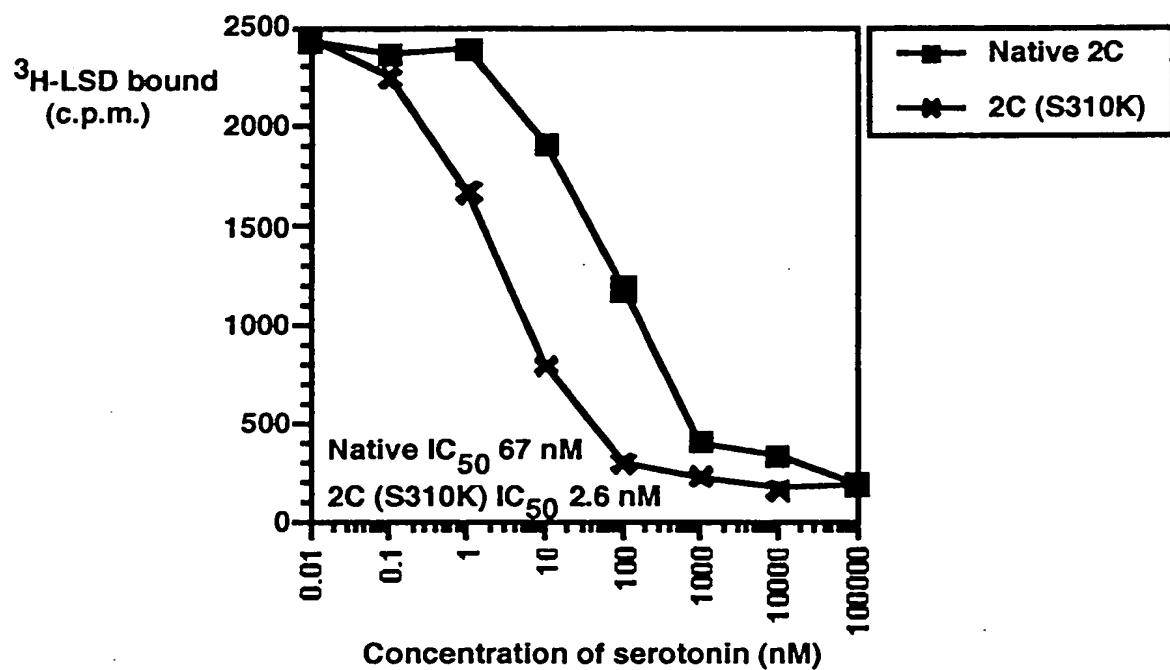


FIGURE 5

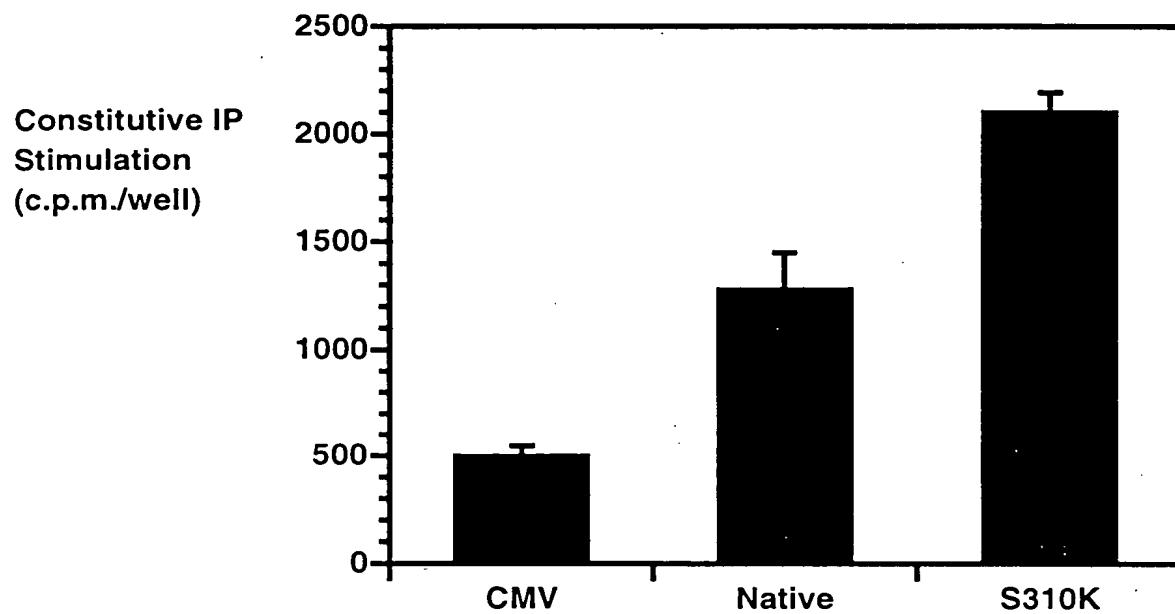


FIGURE 6

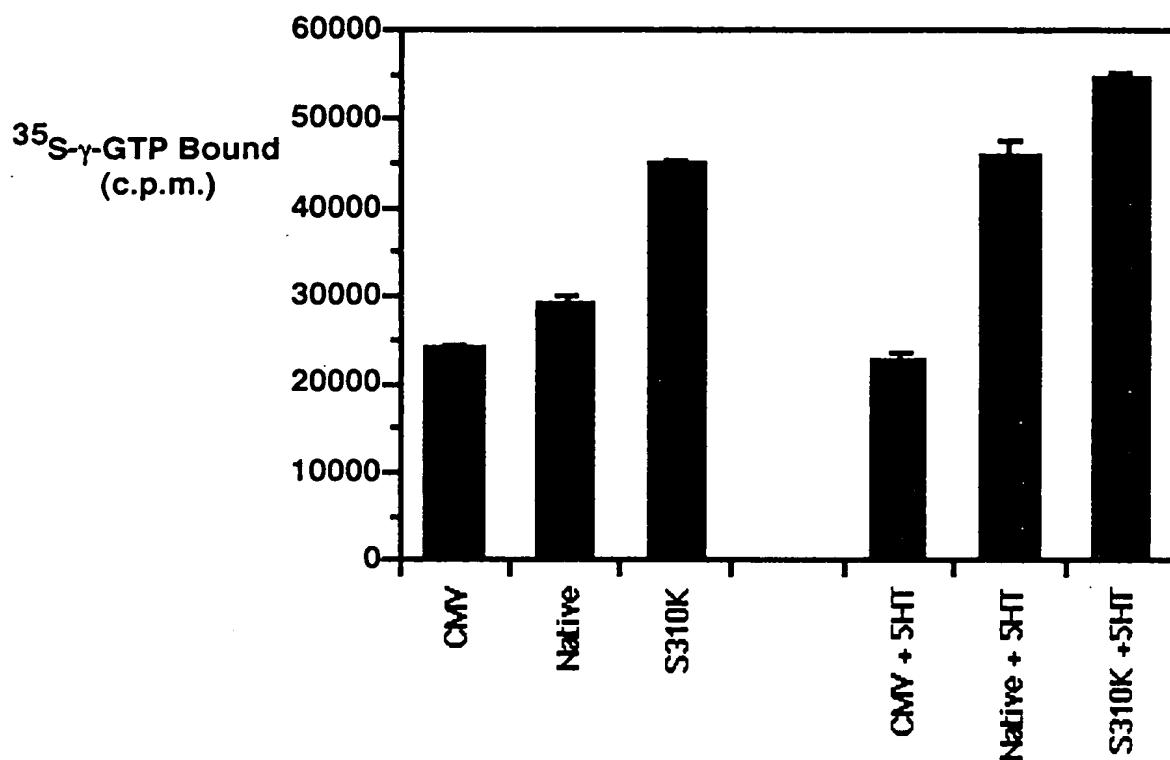


FIGURE 7

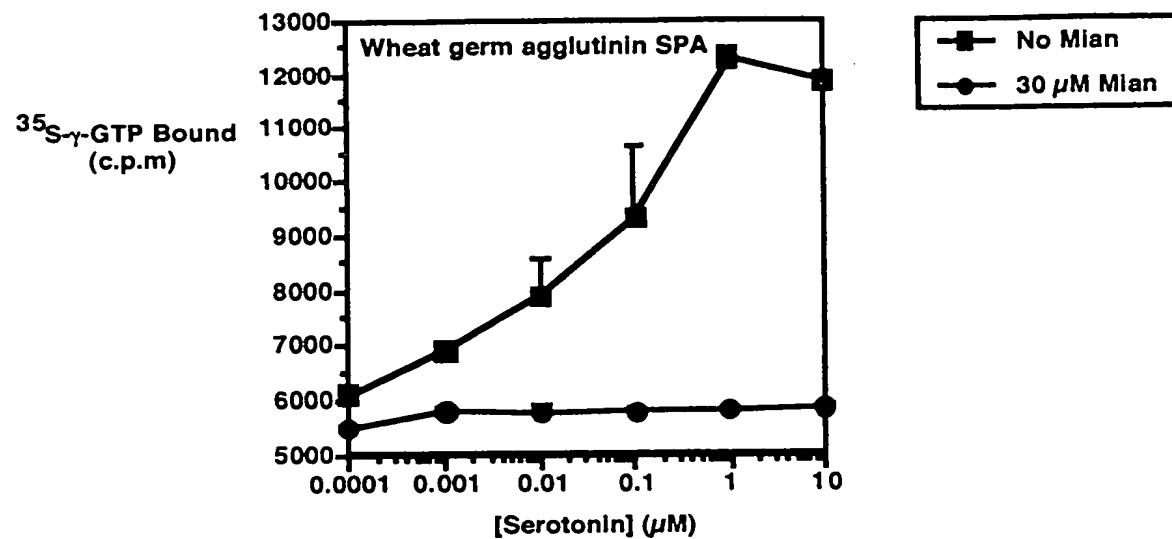


FIGURE 8

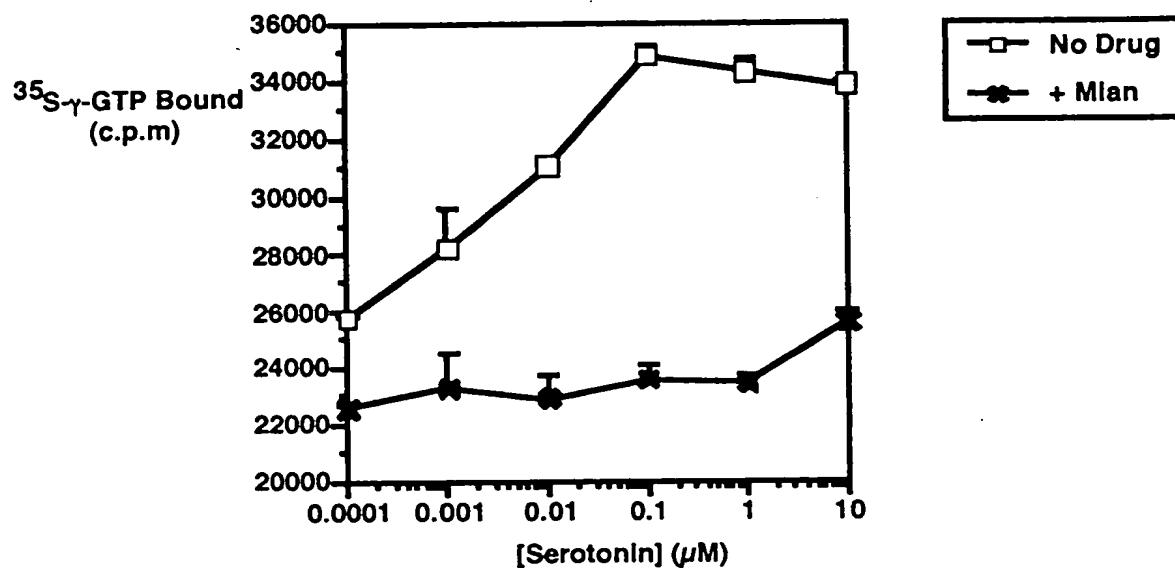


FIGURE 9

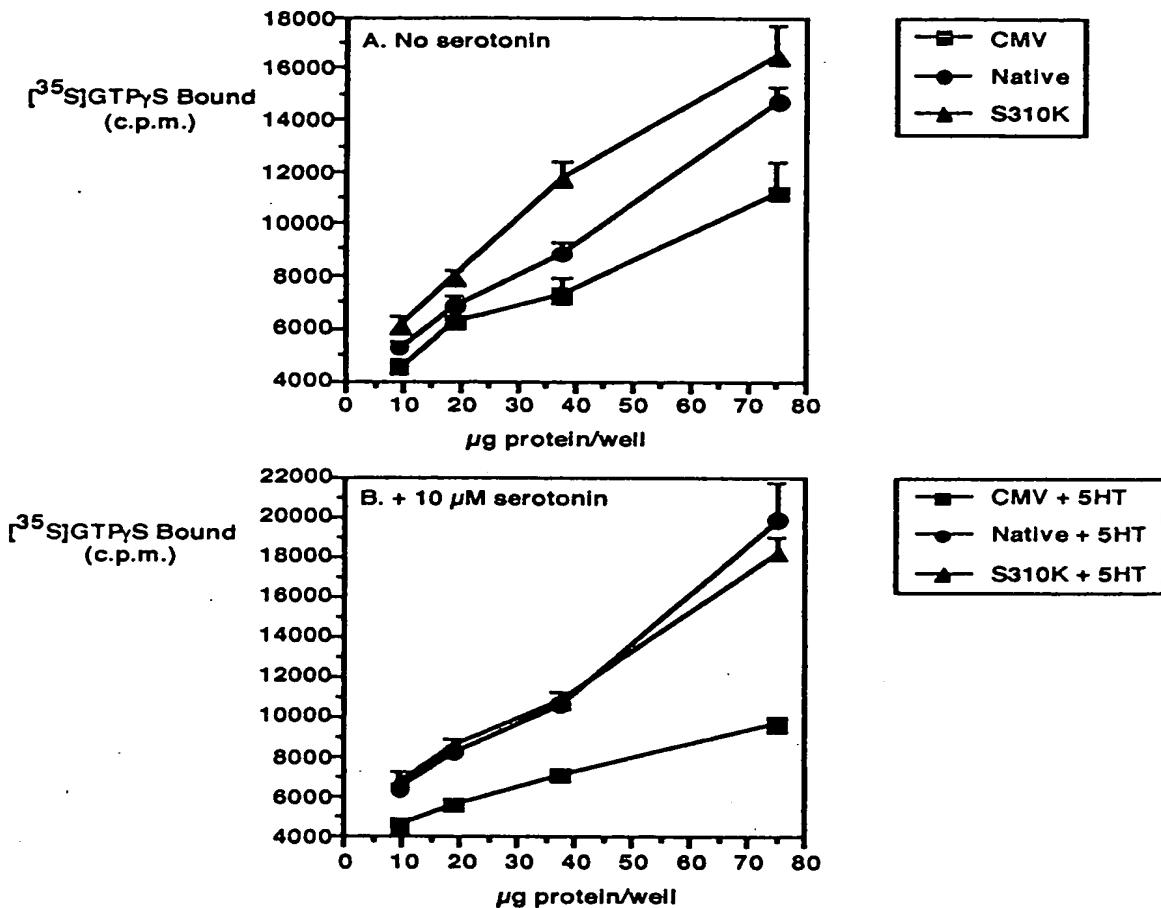


FIGURE 10

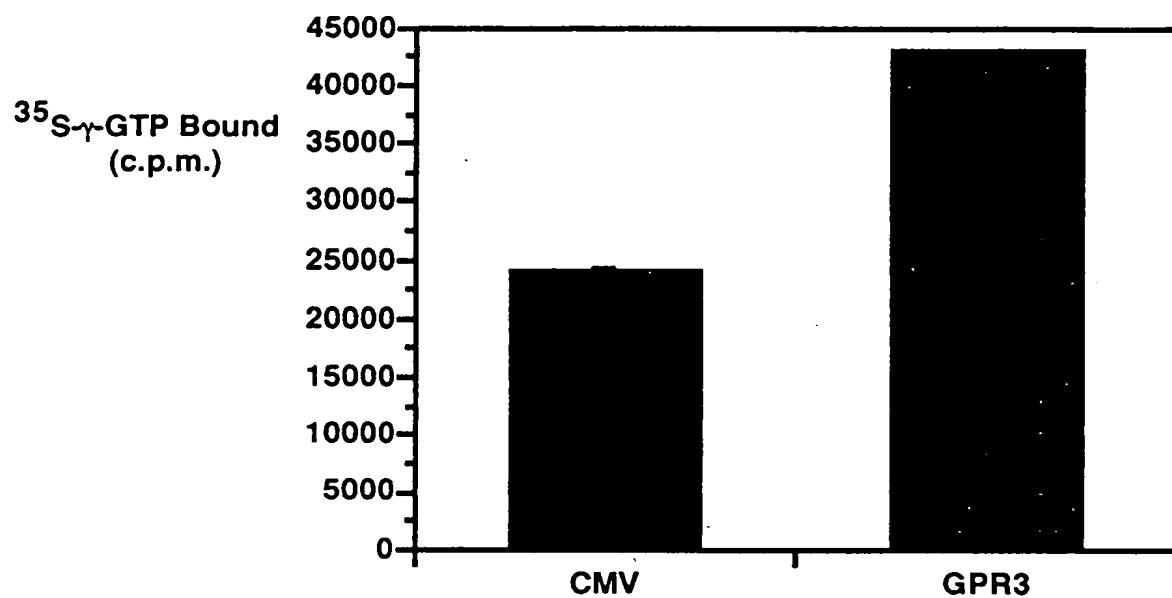


FIGURE 11

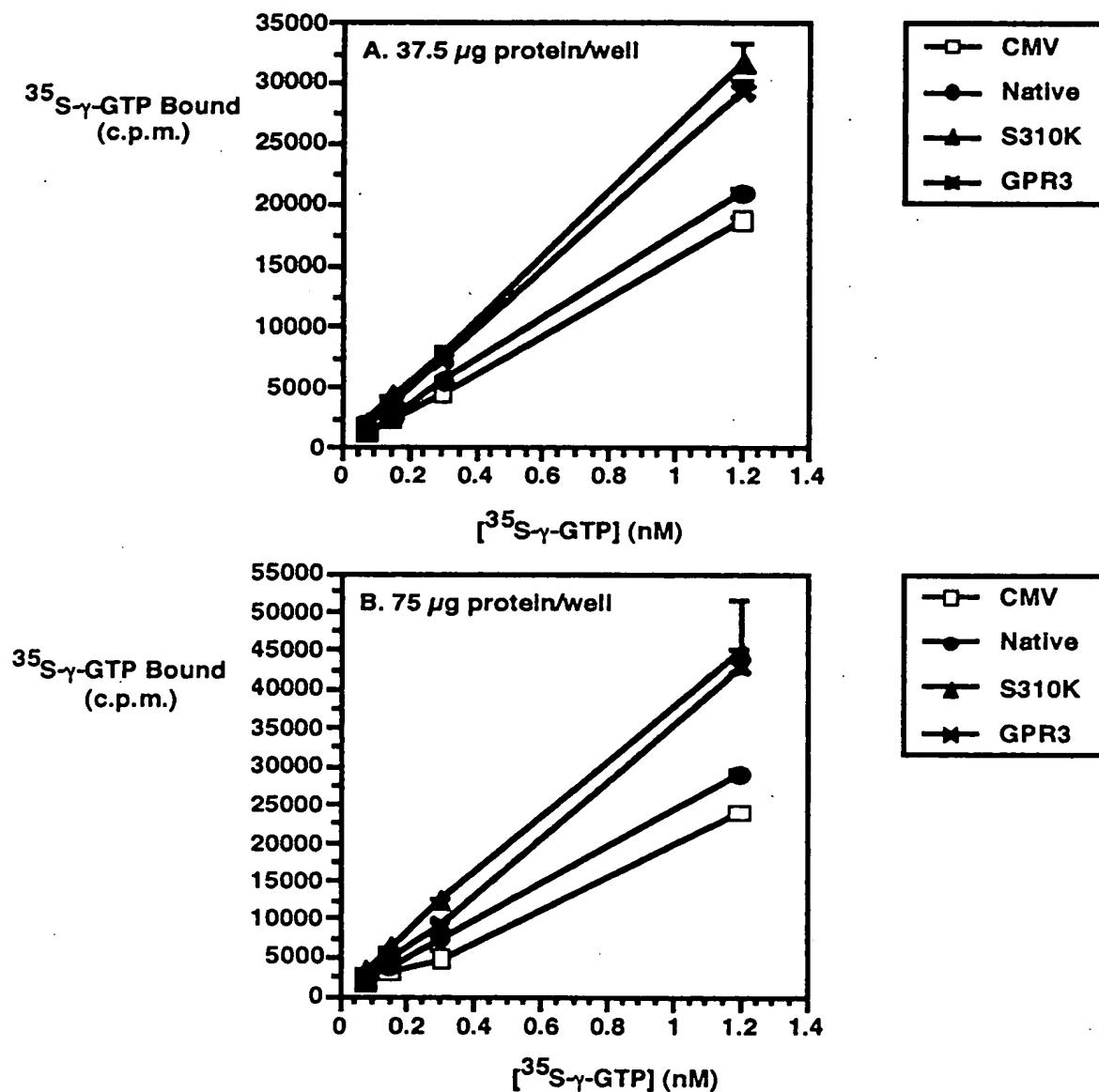


FIGURE 12

10 20 30 40

1 H H - - - G G G S GPR 3 protein
 1 H N A S A A S L N D S Q V V V V A R E G A A A R A T A A R G G P D T G E X G P P A GPR 6 protein
 1 H N - - - E D L K V N L - - - S G L GPR 12 protein

50 60 70 80

8 P L A A L S A G S G N V N V S S W G P A B G P T G P A A P L P S P K A A D V V L L GPR 3 protein
 41 A A A - L C A G G G G A N G S L E L S S Q L S A G P P G L L P A V N P X D V L L GPR 6 protein
 13 E R D Y L D A A A A E N I S A A V S E R V P A V E P E P E L - V V N P X D I V L GPR 12 protein

90 100 110 120

48 C I S G T L V S C E N A L V V A I I V G T P A F R A P M F L L V G S L A V A D L GPR 3 protein
 80 C V S G T V I A C E N A L V V A L I A S T P A L R T P H F V L V G S L A T A D L GPR 6 protein
 52 C T S G T L I S C E N A I V V L I I F H N E S L R A P H F L L I G S L A L A D L GPR 12 protein

130 140 150 160

88 L A G L G L V L H F A A V F C I G S A E H S L V L V G V L A H A F T A S I G S L GPR 3 protein
 120 L A G C G L I L H F V F Q Y L V P S E T V S L L T V G F L V A S F A A S V S S L GPR 6 protein
 92 L A G I G L I T N F V F A Y L L Q S E A T K L V T I G L I V A S F S A S V C S L GPR 12 protein

170 180 190 200

128 L A I T V D R Y L S L Y N A L T Y Y S E T T V T R T Y V H L A L V A G G G A L G L GPR 3 protein
 160 L A I T V D R Y L S L Y N A L T Y Y S R R T L L G V H L L L A A T X T V S L G L GPR 6 protein
 132 L A I T V D R Y L S L Y Y A L T Y H S E R T V T F T Y V H L V H L X G T S I C L GPR 12 protein

210 220 230 240

168 G L L P V L A X N C L D G L T T C G V V Y P L S K N H L V V L A I A F F H V F G GPR 3 protein
 200 G L L P V L G X N C L A E R A C S V V R P L A R S H V A L L S A A F F H V F G GPR 6 protein
 172 G L L P V M G X N C L R D E S T C S V V R P L T K N N A A I L S V S F L F H F A GPR 12 protein

250 260 270 280

208 I H L Q L Y A Q I C R I V C R H A Q Q I A L Q R H L L P A S H Y V A T R K G I A GPR 3 protein
 240 I H L H L Y V R I C Q V V A R H A H Q I A L Q Q H C L A P P H L A A T R K G V G GPR 6 protein
 212 L H L O L Y I Q I C K I V H R H A H Q I A L Q H H F L A T S H Y V T T R K G V S GPR 12 protein

290 300 310 320

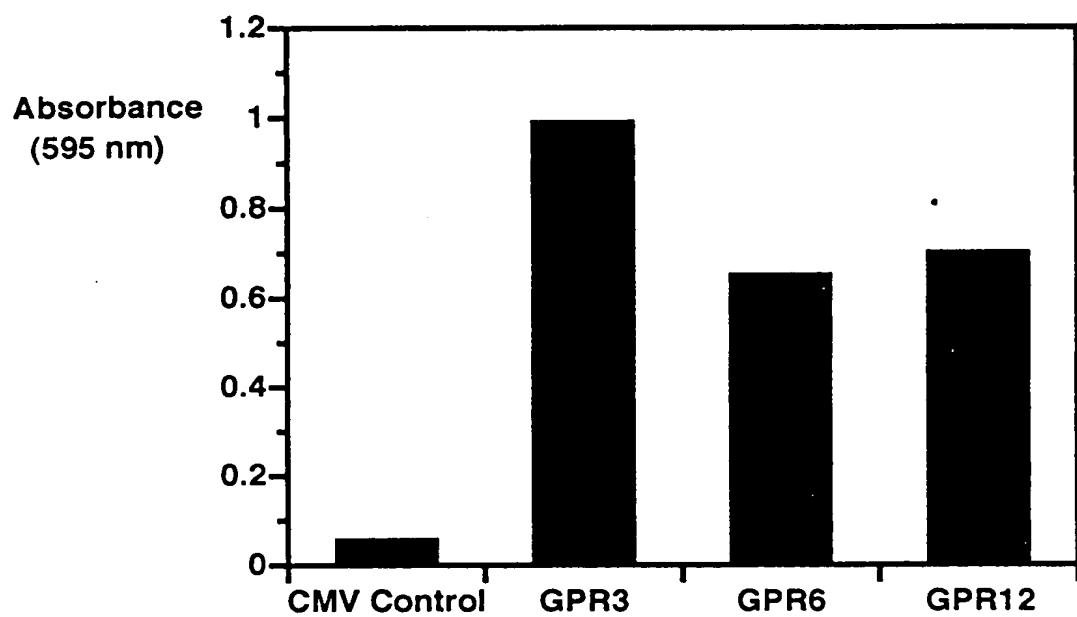
248 T L A V V L G A F A A C A L P F T V Y C L L G D A H S P P L Y T Y L T L L P A T GPR 3 protein
 280 T L A V V L G T F G A S A L P F A I Y C V V G S H E D P A V Y T Y A T L L P A T GPR 6 protein
 252 T L A I I L G T F A A C A M P P T L Y S L I A D Y T Y P S I Y T Y A T L L P A T GPR 12 protein

330 340 350 360

288 Y N S H I N P I I Y A F R N Q D V Q K V L W A V C C C C S S S K I P F R S R S P GPR 3 protein
 320 Y N S H I N P I I Y A F R N Q E I Q R A L A L L L C G C F Q S K V P F R S R S P GPR 6 protein
 292 Y N S I I N E P I Y A F R N Q E I O K A L C L I C C G C I P E S L A Q R A R S P GPR 12 protein

328 S D V GPR 3 protein
 360 S E V GPR 6 protein
 332 S D V GPR 12 protein

FIGURE 13



Pons OCx Hypoth. TCx FCx Pancreas Thyroid Heart Spleen Lung Liver

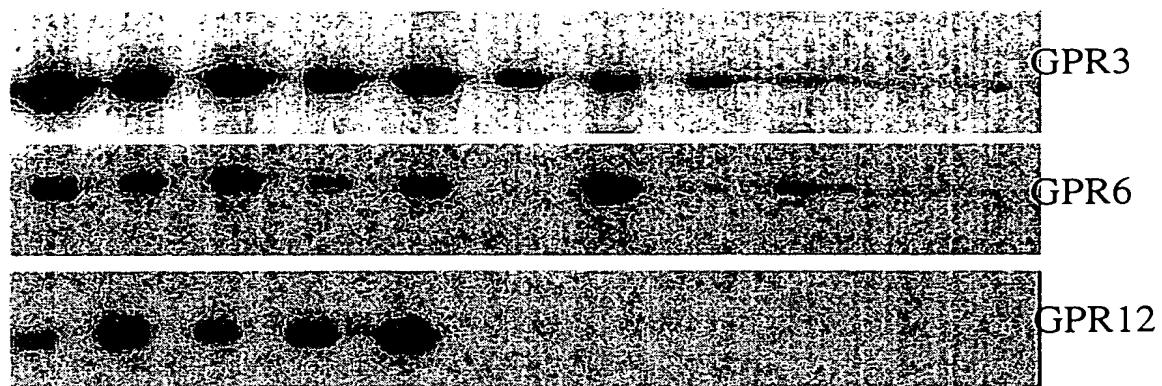
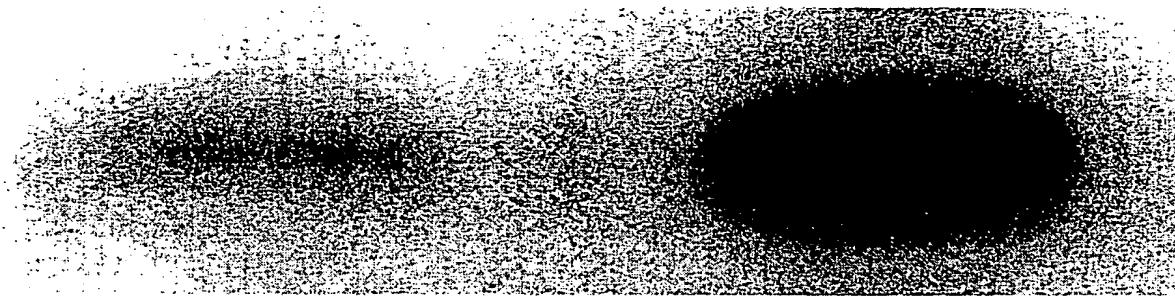


FIGURE 14

FIGURE 15



Control Tissue

Epilepsy Biopsy

FIGURE 16

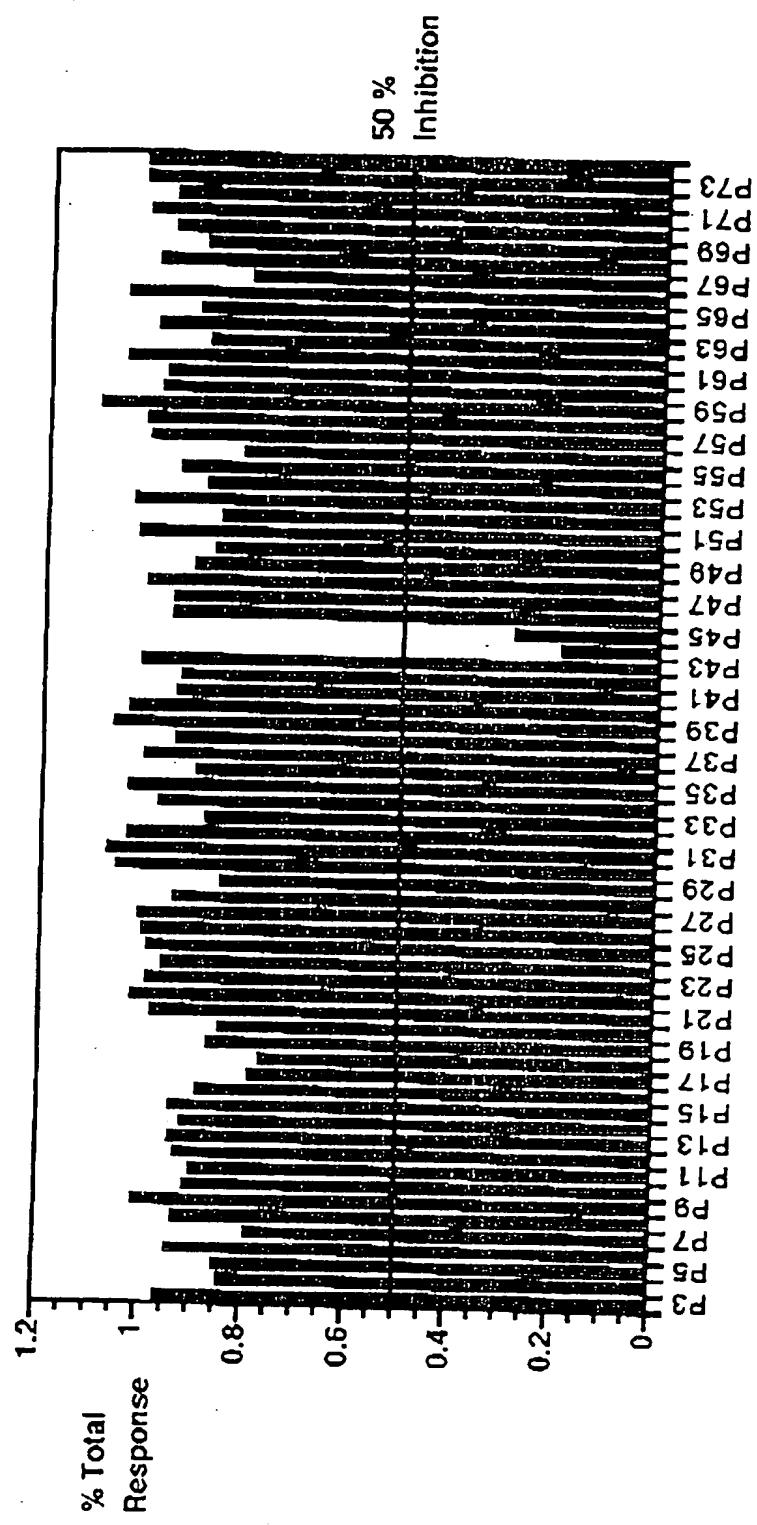


FIGURE 17

